

1937/PCT

**Re: International Patent Application No. PCT/CH03/000240
"Anchoring means for intervertebral implants"
in the name of Mathys Medizinaltechnik AG
to be transferred to Synthes GmbH
(amendments under PCT Article 41)**

I Dr. KAISER Peter
Letziggraben 47
8003 Zürich

Switzerland

do hereby certify that I am conversant with the English and German languages, and am a competent translator thereof, and I further certify that to the best of my knowledge and belief the attached document is a true and correct translation made by me of the documents in the German language attached hereto.

Signature of translator: *P. Kaiser*

Dated *21. 12. 2005*

Amended claims under PCT article 41 of PCT Application No. PCT/CH03/000240
"Anchoring means for intervertebral implants" in the name of Mathys
Medizinaltechnik AG"

Patent claims

1. An intervertebral implant (15) with two anchoring means (21) to fix the
5 intervertebral implant (15) on the end plates of a body (19, 20) of the vertebra
wherein
 - A) each anchoring means (21) comprises an anchoring part (1) comprising a
central axis (6) and two end faces (4, 5) transverse to the central axis (6),
 - B) each anchoring means (21) comprises at least two spikes (7) that protrude
10 past the end faces (4, 5), are parallel to the central axis (6) and can be
pressed into an end plate of a body (19, 20) of the vertebra,
characterised in that
 - C) the anchoring part (1) comprises a hollow space (3) passing through
parallel to the central axis (6),
 - 15 D) the anchoring means (1) comprises fastening means (9) by means of which
the anchoring means can be detachably locked on an intervertebral implant
(15),
 - E) the intervertebral implant (15) comprises a closing plate each (13, 14) that
intersects the central axis (6), and
 - 20 F) the closing plates (13, 14) can pass through the hollow spaces (3) in the
anchoring parts (1).
2. An intervertebral implant (15) according to claim 1, characterised in that the
fastening means (9) can be elastically deformed transversely to the central
25 axis (6) and in the non-deformed state protrude into the hollow space (3).
3. An intervertebral implant (15) according to claim 2, characterised in that the
fastening means (9) are hooks (10) that can be elastically deformed
transversely to the central axis (6) with lugs (11) facing the central axis (6).
30
4. An intervertebral implant (15) according to claim 3, characterised in that the
hooks (10) are provided in the hollow space (3).

5. An intervertebral implant (15) according to any one of claims 1 to 4, characterised in that the fastening means (9) and the anchoring part (1) are integral.
- 5 6. An intervertebral implant (15) according to any one of claims 3 to 5, characterised in that the hollow space (3) comprises depressions (8), wherein the hooks (10) are provided.
- 10 7. An intervertebral implant (15) according to claim 6, characterised in that perpendicularly to the central axis (6) the recesses (8) have a depth T and the maximum length of the lugs (11), measured perpendicularly to the central axis (6), is L , while $L < T$.
- 15 8. An intervertebral implant (15) according to any one of claims 1 to 7, characterised in that the anchoring part (1) has an annular construction and the cross-sectional surface of the hollow space (3) at right angles to the central axis (6) and/or the cross-sectional surface of the anchoring part (1) bordered by the external sheathing surface at right angles to the central axis (6) are circular surfaces, elliptical surfaces, polygonal surfaces or oval
20 surfaces.
- 25 9. An intervertebral implant (15) according to any one of claims 1 to 8, characterised in that at each end it comprises a closing plate (13, 14) that intersects the central axis (6) and that the shape of the hollow space (3) is made to suit the closing plates (13, 14).
- 30 10. An intervertebral implant (15) according to claim 9, characterised in that the closing plates (13, 14) are mounted without clearance in the hollow spaces (3) of the anchoring parts (1) and can be displaced relative to the central axis (6).
11. An intervertebral implant (15) according to any one of claims 1 to 8, characterised in that the anchoring parts (1) have a clearance for rotation

about the central axis (6) with fastening means (9) fixed on the closing plates (13, 14).

12. An intervertebral implant (15) according to any one of claims 1 to 11,
5 characterised in that the closing plates (13, 14) comprise second fastening means, in which the fastening means (9) can be engaged on the anchoring parts (1).
13. An intervertebral implant (15) according to claim 12, characterised in that it
10 has an external sheathing surface (16) and as second fastening means it comprises depressions (18) protruding into the sheathing surface (16) transversely to the central axis (6) for the partial accommodation of the fastening means (9).
- 15 14. An intervertebral implant (15) according to any one of claims 1 to 13, characterised in that the closing plates (13, 14) have axially projecting segments (22) with reduced diameters.